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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,733	12/10/2003	John A. Agostinelli	85635SHS	6691

7590 01/03/2006

Pamela R. Crocker
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

MAHONEY, CHRISTOPHER E

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/732,733	Applicant(s) AGOSTINELLI ET AL.	
	Examiner Christopher E. Mahoney	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☒ Claim(s) 76-78, 81, 84 and 87 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 8-10, 19, 23, 63, 68, 69 and 71-73 is/are rejected.
- 7) ☒ Claim(s) 12, 14 and 65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Jul 05 & Oct 05</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 3,6,7,11,13,15-18,20-22,24-62,64,66,67,70,74,75,79,80,82,83,85,86 and 88.

DETAILED ACTION

Election/Restrictions

Claims 79-80, 82-83, 85-86 will be rejoined upon allowance of this application. These claims were non elected and will be rejoined because they either depend from an allowed claim or contain all of the features of an elected claim which render the elected claim or claims allowable.

Claims 3, 6-7, 11, 13, 15-22, 24-62, 64, 66-67, 70, 74-75 and 88 also remain withdrawn from consideration. Claims 25-42 appear to be directed to projecting a virtual image as disclosed in the cited prior art. Claim 88 may be amended (i.e. changing “surface” to --screen--) to correspond to the similar allowable elected claims (i.e. claim 87) so that it may also be rejoined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4, 19, 23, 63, 68, and 73 are rejected under 35 U.S.C. 102(e) as being anticipated by Streid (U.S. Pub. No. 20050041219). Streid teaches a display apparatus for providing images on a curved display comprising a line object generation apparatus 12/52, a laser source (paragraph 35, for example) for providing an illumination beam a linear spatial light modulator (GLV) for modulating the beam and a projection lens 30/54 for directing the beam

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toward a line image scanner 16/58 for forming the image on the curved surface 14/62. As seen in figure 1 the line object generation is placed above eye level. Figure 1 displays that the scanner is near the center C of the curved display surface. The screen may be cylindrical. Rotating bigon mirror 16 scans the light. Figure 4 and paragraphs 51 and 55 teach that the screen may be a rear projection screen.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Streid (U.S. Pub. No. 20050041219) in view of Kowarz (U.S. Patent No. 6,411,425). Streid teaches the salient features of the claimed invention except for a grating electromechanical system. Kowarz teaches GEMs 85 in an image projector as well as a scanning mirror 77. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Kowarz for the purpose of a creating a simpler and less costly system.

Claims 8-10 and 71-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Streid (U.S. Pub. No. 20050041219) in view of Kikuchi (U.S. Patent No. 6,897,992). Streid teaches the salient features of the claimed invention except for a spatial filter blocking zeroth order light and providing one diffracted order of light. Kikuchi teaches in figure 7, col. 4, lines 37-57, and col. 11, line 24 through col. 12, line 15 that it was known to provide a spatial filter

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blocking zeroth order light and providing one diffracted order of light. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Kikuchi for the purpose of suppressing speckle noise and suppressing image degradation.

Allowable Subject Matter

Claims 12, 14, and 65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 76-78, 81, 84, and 87 are allowed.

Claims 79-80, 82-83, and 85-86 are allowable due to their dependence on an allowed claim but are presently non elected.. Claims 79-80, 82-83, and 85-86 will be rejoined and allowed when the application is otherwise ready for allowance.

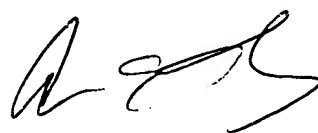
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Mahoney whose telephone number is (571) 272-2122. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'A. E. Mahoney', is positioned above the printed name.

Christopher E Mahoney
Primary Examiner
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